1 Carrier growtreed

THE ROCKEFELLER UNIVERSITY

pro bono humani generis

1230 YORK AVENUE - NEW YORK, NEW YORK 10021-6399

Joshua Lederberg
UNIVERSITY PROFESSOR

September 7, 1994

Dr. David Robinson Carnegie Commission on Science Technology and Government New York, N.Y.

## Dear David:

This is to request support from the Carnegie Corporation on behalf of my policy-oriented work relating to the proliferation of weapons of mass destruction, and defenses against attack with biological weapons in particular. This case embraces many of the perplexities of relating science, technology and government, especially in areas of fragmented executive responsibility.

I am requesting partial funding for one research assistant, who can help me with the homework -- library lookup, file and records, correspondence -- needed to backup my extracurricular activity. If the Corporation could award \$25,000 per year, including whatever overhead allowance is within your policy, I could piece together the remaining needs for a total of \$75,000 including overhead, from other sources. The overall budget would include a total of \$5000 for travel, publications and other expenses. This is matched principally by the University's contribution to my salary and to the major part of my office expenses.

I have been actively engaged in such studies since 1970, when I was appointed an adviser to our mission at the Conference on Disarmament in Geneva during the negotiation of the Biological Weapons Convention.

During my 20 years at Stanford, I was a co-founder of the curriculum on National Security and Arms Control, and remain on its executive committee. Bill Perry was the director of that program most recently just prior to his appointment as Secretary of Defense.

While my main preoccupation remains my laboratory research at the Rockefeller University, I do continue a lively involvement in policy studies and in their application to several executive departments of government. My main formal channels are on advisory panels to the SecDef, the CNO, the Secretary of Energy, other government agencies, the National Academy of Sciences; and informally beyond those. While retaining the utmost confidence where appropriate, I also view these contacts as indispensable in offering me an insight to the challenges to and shortcomings of existing policies.

The burning issue on my mind right now is, as we discussed, defense of civil populations

against CBW. It is an urgent problem here in NYC (and I have not ignored the municipal level of responsibility.) It can hardly be ignored in commitments overseas -- and it would be bizarre to have our troops reasonably well defended (as more or less they are), while the civil populations and logistic infrastructure in our allied territories are naked. There is plenty of insight -- Gen. Powell turned that around when he was JCS -- but severe problems of turf and mission.

The main policy task that I would address in the near future is how to cope with infectious disease crises -- there is a lot of commonality among those that might arise from natural history (of the bugs themselves) and those from outrageous malice. This would entail the integration of several disparate disciplines:

- a) the microbiology of the infectious agents, the choice of the likeliest candidates in different contexts, and the means of rapid diagnosis of the hazard.
- b) the prophylactic and therapeutic measures that might be recruited in defense.
- c) the framework of professional public health ministration of such services.
- d) how these can be integrated into diverse governmental strata: municipal, state, federal; and civil vs. military
- e) implications for civil order and national security
- f) policies of international conventions, deterrence, technology transfer, sanctions and alliance, as they are impacted by and bear on the proliferation of BW technology.

I already participate in a wide range of discussions in government, and in private sector councils and academia, on these issues. I do not have an organized policy research structure at the Rockefeller University. We are simply not departmentalized, and each laboratory like my own of "Molecular Genetics and Informatics" operates with a high degree of autonomy, and responsibility for obtaining the necessary funds. However, I do not know of any other person or group that can bring to bear a comparable range of experience and technical skill that these issues deserve. Otherwise, I might feel less urgency about applying the time and energy than I do. The technical intricacies of divers infectious agents, and of the incomplete measures of vaccination and chemotherapy that can be applied in defense already make this a difficult and arcane area. This is further complicated by the confusion of executive responsibility for civil defense: among agencies within the federal government, and different strata of government. Not to mention the international dimensions and the legitimate need for discretion and secrecy.

The grant award, if approved by your foundation, would be addressed simply to the Rockefeller University, tagged for the support of policy research on problems of public protection from infectious disease in the Laboratory of Molecular Genetics and Informatics, under my direction.

Your consideration of this request is greatly appreciated.

ours sincerely,

Joshua Lederberg